

AMENDMENTS TO THE CLAIMS

Please amend claims 1, 5, 19, 24, and 26-27, cancel claim 23, and add new claims 28-31. No new matter is believed to be introduced as a result of the aforementioned amendments and new claims. The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. **(Currently Amended)** An optical coupler comprising:
 an optical element having a substantially flat side and a substantially convex side;
 a detector spaced from the convex side of the optical element; and
 an optical fiber positioned adjacent to the substantially flat side of the optical element
 wherein ~~said~~ the substantially flat side of the optical element is oriented perpendicular to
 an optical axis associated with the optical coupler and the optical element is adapted to
 direct light delivered by the optical fiber to the spaced detector such that light that is
 reflected by the detector does not substantially couple back into the optical fiber.
2. **(Original)** The optical coupler of claim 1 wherein the optical element is
 adapted to produce at least a partial annular shaped light pattern on the detector.
3. **(Original)** The optical coupler of claim 2 wherein the optical element is
 adapted to produce an annular light pattern on the detector.
4. **(Original):** The optical coupler of claim 1 wherein the optical element includes
 a focal point and the detector is positioned relative to the optical element such that the
 light from the optical element is not defocused on the detector.
5. **(Currently Amended)** The optical coupler of claim 1 wherein the optical
 fiber abuts the substantially flat side of the optical element.

6. **(Original)** A light transmission system comprising:
 an optical element having a first surface and a second surface;
 an optical medium having an end adjacent the first surface of the optical element,
 the optical medium having an index of refraction that is substantially similar to an index
 of refraction of the optical element; and
 a detector spaced from the second surface of the optical element;
 wherein said optical element conveys light from the optical medium to the detector, the
 optical element producing a light pattern on the detector that has substantially reduced
 light intensity near the center of the light pattern.
7. **(Original)** A light transmission system of claim 6 wherein the light pattern is
 an annular shaped light pattern.
8. **(Original)** The light transmission system of claim 6 wherein the end of the
 optical medium abuts to the first surface of the optical element.
9. **(Original)** A system for transmitting light from a light source to a detector
 comprising an optical element positioned between the light source and the detector for
 directing light from the light source to the detector, the optical element configured to
 create an annular illuminated region on the detector with a substantially non-illuminated
 center.
10. **(Original)** A system according to claim 9 wherein the light source includes an
 optical fiber.
11. **(Original)** A system according to claim 10 wherein the optical fiber abuts to
 the optical element, and the optical fiber includes a core that has an index of refraction
 that at least substantially matches an index of refraction of the optical element.
12. **(Original)** A system according to claim 9 wherein the light source includes a
 Light Emitting Diode (LED).

13. **(Original)** A system according to claim 9 wherein the light source includes a Vertical Cavity Surface Emitting Laser (VCSEL).

14. **(Original)** A light transmission system comprising:
 a light source;
 a detector; and
 an optical element positioned between the light source and the detector;
 wherein the optical element is configured to direct more than half of the light that is transmitted from the light source to the detector, and to direct less than half of the light that is reflected by the detector back to the light source.

15. **(Original)** The light transmission system of claim 14 wherein the optical element is configured to produce an annular light pattern on the detector.

16. **(Original)** The light transmission system of claim 14 wherein said optical element has a focal point that is in front of the detector.

17. **(Original)** The light transmission system of claim 14 wherein said optical element has a focal point that is behind the detector.

18. **(Original)** The light transmission system of claim 14 wherein said optical element comprises a lens that is shaped to produce an annular light pattern on the detector.

19. **(Currently Amended)** The light transmission system of claim 18 wherein the lens has a substantially plano-convex shape.

20. **(Original)** The light transmission system of claim 14 wherein said light source includes an optical fiber.

21. **(Original)** The light transmission system of claim 14 wherein said light source includes a laser.

22. **(Original)** The light transmission system of claim 14 wherein said light source includes a Light Emitting Diode (LED).

23. **(Cancelled)**

24. **(Currently Amended)** ~~The method of claim 23 wherein the~~ A method for providing light from a light source to a detector, the method comprising:
providing light from the light source; and
directing light from the light source to the detector such that light that is reflected by the detector is not substantially coupled back to the light source and the directing step
~~directs~~ light from the light source and produces a light pattern on the detector that has substantially reduced light intensity near the a center of the light pattern.

25. **(Original)** The method of claim 24 wherein the directing step directs light from the light source and produces an annular shaped light pattern on the detector.

26. **(Currently Amended)** ~~The method of claim 23 wherein the~~ A method for providing light from a light source to a detector, the method comprising:
providing light from the light source; and
directing light from the light source to the detector such that light that is reflected by the detector is not substantially coupled back to the light source and the directing step
~~directs~~ light from the light source is directed to a focal point that is located in front of the detector.

27. **(Currently Amended)** ~~The method of claim 23 wherein the~~ A method for providing light from a light source to a detector, the method comprising:
providing light from the light source; and
directing light from the light source to the detector such that light that is reflected by the detector is not substantially coupled back to the light source and the directing step
directs light from the light source is directed to a focal point that is located behind the detector.
28. **(New)** The optical coupler of claim 1, wherein the substantially convex lens has a slope discontinuity that is located proximate the optical axis.
29. **(New)** The optical coupler of claim 28, wherein the slope discontinuity comprises a curvature discontinuity of the substantially convex lens.
30. **(New)** The light transmission system of claim 6, wherein the second surface of the optical element has a discontinuous slope.
31. **(New)** The light transmission system of claim 30, wherein the second surface of the optical element is grooved.